



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
Group Art Unit 1645

RGW

In
Patent Application of

James W. Schumm, et al.

Application No. 10/769,579

Confirmation No.: 4278

Filed: January 30, 2004

Examiner: _____

“MULTIPLEX AMPLIFICATION OF
SHORT TANDEM REPEAT LOCI”

INFORMATION DISCLOSURE STATEMENT
PURSUANT TO 37 CFR §1.97(b)

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

The Examiner's attention is directed to the references which are listed on the attached Form PTO/SB/08A and/or PTO/SB/08B, copies of which are not being provided herewith because, pursuant to 37 C.F.R. §1.98(d), copies were previously submitted to, or cited by, the office in U.S. Serial No. 09/839,478, filed April 20, 2001, now abandoned; which is a continuation of U.S. Serial No. 09/327,229, filed June 7, 1999, now U.S. Patent No. 6,221,598; which is a continuation of U.S. Serial No. 08/316,544, filed September 30, 1994, now abandoned, and which is being relied upon for an earlier filing date under 35 U.S.C. §120.

Citation of these references is respectfully requested.

No concession is made that these documents are prior art, and Applicant expressly reserves the right to antedate the documents as may be appropriate.

Respectfully submitted,

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Substitute of form 1449/PTO

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INFORMATION DISCLOSURE STATEMENT BY APPLICANT

Application Number	10/769,579
Filing Date	January 30, 2004
First Name Inventor	James W. Schumm
Group Art Unit	1645
Examiner Name	
Attorney Docket Number	016026-9238-02

(use as many sheets as necessary)

Sheet 1 of 1

U.S. PATENT DOCUMENTS

Examiner Initials	U.S. Patent Document Number	Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document
	4,683,195	Mullis et al	Jul., 1987
	4,683,202	Mullis et al.	Jul., 1987
	5,364,759	Caskey et al.	Nov., 1994
	5,843,660	Schumm et al.	Dec., 1999
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	5,783,406	Schumm et al.	Jul., 1998
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	5,674,686	Schumm et al.	Oct., 1997

FOREIGN PATENT DOCUMENTS

Examiner Initials	Country Code	Foreign Patent Document Number	Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document	Translation	English Abstract
	PCT	WO 93/18177	Fortina and Surrey	Sep., 1993		
	PCT	WO 93/18178	Fortina and Surrey	Sep., 1993		
	PCT	WO 96/10648	Promega Corporation	Apr., 1996		

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Sheet 1 of 10

OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS

Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, pages(s), volume-issue numbers(s), publisher, city and/or country where published.

Alford, R.L., *et al.*, "Rapid and Efficient Resolution of Parentage by Amplification of Short Tandem Repeats" *Am. J. Hum. Genet.* (1994) 55: 190-195.Anker, R., *et al.*, "Tetranucleotide Repeat Polymorphism at the Human Thyroid Peroxidase (hTPO) Locus," *Human Molecular Genetics* (1992) 1(2):137.

Attachment #1, Sequence Alignments for SEQ ID No: 1, 2, 7, 8, 11, 15, 16, 19, 20, 27, and 28.*

Ballabio, A., *et al.* "PCR Test for Cystic Fibrosis Deletion" *Nature* (1991) 343: 220.Ballabio, A., *et al.*, "Screening for Steroid Sulfatase (STS) Gene Deletions by Multiplex DNA Amplification," *Human Genetics* (1990) 84 (6):571-573.Bassam, B.J., *et al.*, "Fast and Sensitive Silver Staining of DNA in Polyacrylamide Gels" *Anal. Biochem.*, (1991) 196: 80-83.Beckman, J.S. and Weber, J.L., "Survey of Human and Rat Microsatellites" *Genomics* (1992) 12: 627-631.Beggs *et al.* "Detection of 98% DMD/BMD gene deletions by PCR" *Hum. Genet.* (1990) 86:45-48.Bever, R. A., *et al.*, "Validation and Utilization of Commercially Available STR Multiplexes for Parentage Analysis," *Proceedings from the Fifth International Symposium on Human Identification* 1994 (1995) pp. 61-68.

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		Brunk, C.F., <i>et al.</i> , "Assay for Nanogram Quantities of DNA in Cellular Homogenates" <i>Anal. Biochem.</i> , (1979) 92: 497-500.
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		Edwards, A., <i>et al.</i> , "Genetic Variation at Five Trimeric and Tetrameric Repeat Loci in Four Human Population Groups" <i>Genomics</i> (1992) 12: 241-253.
		Edwards, M. C., <i>et al.</i> , "Multiplex PCR: Advantages, Development, and Applications," <i>PCR Methods and Applications</i> (1994) 3:S65-S75.
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				First Named Inventor	James W. Schumm
				Group Art Unit	1645
				Examiner Name	
Sheet	4	of	10	Attorney Docket Number	016026-9238-02

OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS		
Examiner Initials		Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, pages(s), volume-issue numbers(s), publisher, city and/or country where published.
		Fuentes, J. J., <i>et al.</i> , "Genetic Variation Of Microsatellite Markers D1S117, D11S35, D6S89, APOC2, and D21S168 in the Spanish Population," <i>Int. J. Leg. Med.</i> (Spring 1993) 105:271-277.
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		Genbank Accession No: M21986, 1988.*
		Genbank Accession No: M22970, 1986.*
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		Genbank Accession No: M64554, 1990.*
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		Genbank Accession No: M87312, 1992.*
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		Kimpton, C., <i>et al.</i> , "Automated DNA Profiling Employing Multiplex Amplification of Short Tandem Repeat Loci," <i>Adv. Forensic Haemogenet</i> (1994) 5:309-311.
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		Lee, S. B., <i>et al.</i> , "Microwave Extraction, Rapid DNA Quantitation and Fluorescent Detection of Amplified Short Tandem Repeats," <i>Proceedings from the Fifth International Symposium on Human Identification 1994</i> (1995) pp. 137-145.
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		Micka K. <i>et al.</i> (1996) "Validation of Multiplex Polymorphic STR Amplification Sets Developed for Personal Identification Applications," <i>J. For. Sci.</i> Jul., 582-590
		Moretti, T., <i>et al.</i> , (1998) "Enhancement of PCR Amplification Yield and Specificity Using AmpliTaq Gold DNA Polymerase," <i>Biotechniques.</i> 25:716-722.
		Morral, N. and Estivill, X., "Short Communication--Multiplex PCR Amplification of Three Microsatellites within CFTR Gene", <i>Genomics</i> , 13: 1362-1364 (1992).
		Nakamura, Y., <i>et al.</i> , "Variable Number of Tandem Repeat (VNTR) Markers for Human Gene Mapping" <i>Science</i> (1987) 235: 1616-1622.

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Examiner Signature		Date Considered

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				Application Number	10/769,579
				Filing Date	January 30, 2004
				First Named Inventor	James W. Schumm
				Group Art Unit	1645
Examiner Name					
Sheet	9	of	10	Attorney Docket Number	016026-9238-02

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Examiner Initials		Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, pages(s), volume-issue numbers(s), publisher, city and/or country where published.
		Sambrook <i>et al.</i> , "Molecular Cloning – a laboratory manual" (1989) 2 nd edition, Cold Spring Laboratory Press.
		Schmalzing, D. <i>et al.</i> , (1999) "Two-color Multiplexed Analysis of Eight Short Tandem Repeat Loci with an Electrophoretic Microdevice," <i>Anal. Biochem.</i> 270:148-152.
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		Thomson, J., <i>et al.</i> , (1999) "Validation of Short Tandem Repeat Analysis for the Investigation of Cases of Disputed Paternity," <i>Forensic Sci. Int.</i> 100:1-16. (Abstract--Downloaded from NCBI PubMed).
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